TOWN OF BETHEL – UTILITIES DEPARTMENT

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2020 Consumer Confidence Report - Bethel Utility Department

Introduction

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Last year, we conducted tests for over eighty possible contaminants, and only detected fifteen.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material and can pick up substances from human activity.

Source of Bethel's Water

The main source of supply for the Bethel system is the Maple Avenue Wellfield, consisting of two gravel packed wells off of Ballfield Road. These two wells supply the majority of the water to the system. The system also includes surface water supply from the Chestnut Ridge Reservoir and the Eureka Lake / Mountain Pond Reservoir. The system serves approximately 9507 customers through over 42 miles of water mains, in the downtown and western side of town. In 2020 the Wellfield produced 360,850,000 gallons, for a daily average of 988,630 gallons. Water from the Maple Avenue Wells is treated with liquid chlorine for disinfection, and a blended phosphate is added for corrosion control and sequestering purposes. In 2020 the Eureka Plant was on for parts of four days, producing 445,000 gallons. No water entered the system from the Chestnut Ridge Plant. After the two new wells in the Maple Avenue Wellfield were placed online, in July of 2017, the two surface water treatment plants were placed on Emergency/Standby status. Both Plants are exercised weekly. In 2020 improvements to the system included finalizing the construction of the new Chestnut Ridge Storage Tank and progressing with the planning and permitting process for the new Bergstrom Wellfield. Over 3500 feet of new water mains were installed, replacing older, undersized water mains.

Source Water Assessment

A Source Water Assessment of the Maple Avenue Wellfield, the Eureka/Mountain Pond source, and Chestnut Ridge System was recently conducted. The updated assessment report can be found on the DPH's website: http://www.dph.state.us/BRS/Water/SourceProtection/Assessment/Assessments.html. The assessments found that the Maple Avenue Wellfield, Chestnut Ridge Reservoir and the Eureka Reservoir Systems have a LOW susceptibility to potential sources of contamination. Additional source water assessment information can be found at the EPA's website: www.epa.gov/safewater/protect/swap.html.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). Contaminants that may be present in source water include **microbial contaminants** such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife**; inorganic contaminants** such as salts and metals which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; **pesticides and herbicides** which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses; **organic chemical contaminants** including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems; and **radioactive contaminants** which can be naturally occurring or be the result of oil and gas production and mining activities.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Health Effects Statements: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Bethel Utility Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

How can I get involved?

Public Utility Commission meetings are generally held on the first and third Monday of each month, in Meeting Room A, at the Municipal Center. Water related issues can be addressed at the Public Utility Office at 203-794-8549. The current Public Utility Commissioners are: Matthew Knickerbocker, Richard Straiton, Paul Szatkowski, Deno Gualtieri, and Peter Valenti. Current Utility Department employees include: Thomas Villa, Public Utilities Director, Kelly Curtis, Utilities Supervisor, Edward Knapp, Chief Plant Operator, Justin Bechtold, Richard Benzing, Wayne Clark, Chris McCollam and Chris Cudzillo, all Water and Sewer Maintainers. Copies of this report are available in the Public Works Office in the Municipal Center and this report is published on the Town Of Bethel website at www.Bethel-CT.gov

Conservation Tips

Did you know that the average U.S. household uses approximately 300 - 400 gallons of water per day or 75 - 100 gallons per person per day? Luckily, there are many low cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Fix leaky toilets. Toilets account for 25% of water used. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak and you should replace the flapper valve.
- Replacing an older toilet that uses 3.5 to 5.0 gallons per flush with a new, more efficient model that uses 1.28 gallons per flush can save 600 to 1,000 gallons a month.
- Showers account for almost 20% of water used. Replace an older showerhead with a water-efficient showerhead. They're inexpensive and easy to install. Replacing an older showerhead with a newer water efficient one can save up to 250 gallons a month.
- Take short showers - a 5 minute shower uses 10 to 25 gallons of water compared to up to 50 gallons for a bath.
- Fix leaky faucets. Faucet washers are inexpensive and take only a few minutes to replace.
- Shut off water while brushing your teeth, washing your hands and shaving and save up to 500 gallons a month.
- Run your clothes washer and dishwasher only when they are full.
- Replace older dishwashers and washing machines with newer models that are more water efficient and save on energy bills too.
- Water plants only when necessary.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- When washing vehicles use a bucket of soapy water and use the hose only for rinsing.
- Use a broom instead of a hose for cleaning driveways and sidewalks.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough
- Fire Sprinkler System

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect Bethel's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range Low	Range High	Sample Date	Violation	Typical Source
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (ppm)	4	4	1.75	0.88	1.75	2020	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	4.9*	0	8.4	2020	No	By-product of chlorinating drinking water
Total Trihalomethanes (ppb)	NA	80	21.0*	4.2	29.0	2020	No	By-product of chlorinating drinking water
Total Organic Carbon (Removal Ratio)	NA	> 1.0	1.8*	1.6	2.0	2020	No	Naturally present in the environment
Inorganic Contaminants								
Barium (ppm)	2	2	0.063	0.063	0.063	2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper - source water (ppm)	NA	NA	0.00	0.00	0.00	2020	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	2.2	2.1	2.2	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)	NA	NA	31***	30	31	2020	No	Erosion of natural deposits; Leaching
Microbiological Contaminants								
Total Coliform (TCR) (positive samples/month)	0	0	0**	NA	NA	2020	No	Naturally present in the environment
Turbidity (NTU)	NA	5	0.11	0.04	0.11	2020	No	Soil runoff

* HAA5, TTHM and TOC compliance is calculated based on a four quarter running annual average and all are in compliance. The range indicated represents the individual sample results.

* * Out of 120 Total Coliform Bacteria Samples collected, none tested positive. No Violation occurred.

*** If you have been placed on a sodium restricted diet, please notify your Physician that your Drinking Water contains 31 milligrams per liter of sodium.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range Lo	Range High	Sample Date	Violation	Typical Source
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	1.26	1.21	1.26	2019	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	1.60	1.15	1.60	2019	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.40	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	<1.0	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Violations and Exceedances
There were no violations or exceedances in 2020

Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Contaminants	State MCL	Your Water	Violation	Explanation and Comment
Chloride	250 ppm	80 ppm	No	

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
Fluoride (ppm)	4	4	ND	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead - source water (ppm)	NA	NA	ND	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrite [measured as	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks,

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
Nitrogen] (ppm)					sewage; Erosion of natural deposits
Asbestos (MFL)	0	NA	ND	No	Erosion of natural deposits

Unit Descriptions	
Term	**Definition**
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
MFL	Million Fibers per Liter

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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